

MATERIAL SAFETY DATA SHEET

SECTION 1: IDENTIFICATION

Product Identification: Particleboard (Urea - Formaldehyde Bonded)

Trade Name: Ultrablend

Synonyms: None

Description: A panel product manufactured from particles of wood bonded together with urea formaldehyde resins.

Product Names: Roseburg Industrial, Roseburg CTG, Roseburg Commercial, Roseburg Underlayment, Roseburg Custom Core, Roseburg Shelving, Printed & Edge-Filled Shelving, Stair Tread, Roseburg Redi-Shelf, Roseburg Factory Coated Products, Roseburg Vinyl, Roseburg Melamine Panel "RMP".

Manufacturer's Name: Roseburg Forest Products Co.

Division: Particleboard

Address: P.O. Box 1088, Roseburg, Oregon 97470

Telephone: (503) 679-3311 Fax (503) 679-9683

Date Prepared: May, 1986

Revised: September, 1987

Revised: December, 1990

Revised: October, 1992

Revised: July, 1995

SECTION 2: HAZARDOUS INGREDIENTS/IDENTIFY INFORMATION

Potential Airborne Releases: The product may release small quantities of formaldehyde (CAS No. 50-00-0) in gaseous form. Emissions decrease through time as the panels age. Manual or mechanical cutting or abrasion processes performed on the product can result in generation of wood dust.

SECTION 3: PHYSICAL DATA

Boiling Point: N/A

Specific Gravity (H₂O = 1): 1

Vapor Density: N/A

SECTION 3: PHYSICAL DATA - CONT'D

% Volatiles By Vol:	0
Melting Point:	N/A
Vapor Pressure:	N/A
Solubility in H ₂ O (% by Wt.)	0.1%
Evaporation Rate: (Butyl Acetate = 1)	N/A
pH	N/A
Appearance & Odor:	Light tan to dark tan. Color and odor are dependent upon wood species.

SECTION 4: FIRE & EXPLOSION DATA

Flash Point:	N/A
Auto Ignition Temp.:	N/A (Will depend upon duration of exposure to heat source and other variables)
Explosive Limits In Air:	See below under "Unusual Fire and Explosion Hazards"
Extinguishing Media:	Water, Carbon Dioxide, Sand
Special Fire Fighting Procedures:	None
Unusual Fire and Explosion Hazards:	Sawing, sanding or machining can produce wood dust as a by-product which may present an explosion hazard if a dust cloud contacts an ignition source. An airborne concentration of 40 grams of dust per cubic meter of air is often used as the LEL for wood dust.

SECTION 5: REACTIVITY DATA

Conditions Contributing to Instability:	Stable under normal conditions
Incompatibility:	Avoid contact with oxidizing agents. Avoid open flame. Product may ignite in excess of 400° F.
Hazardous Decomposition Products:	Thermal and/or thermal-oxidative decomposition can produce irritating toxic fumes and gases, including carbon monoxide, hydrogen cyanide, aldehydes, organic acids and polynuclear aromatic compounds.
Hazardous Polymerization:	N/A

SECTION 6: HEALTH EFFECTS INFORMATION

Exposure Limits Formaldehyde:

OSHA PEL - TWA 0.75 ppm
OSHA PEL - STEL 2.0 ppm
ACGIH TLV - CEILING 0.3 ppm

Wood Dust:

OSHA PEL - TWA: 15.0 mg/m³
5.0 mg/m³ (respirable fraction)

¹See important footnote below concerning OSHA PELs for wood dust

Wood Dust (Softwood):

ACGIH TLV - TWA: 5.0 mg/m³
ACGIH TLV - STEL (15 min.): 10.0 mg/m³

Wood Dust (certain Hardwoods such as Beech and Oak):

ACGIH TLV - TWA: 1.0 mg/m³

Eye Contact:

Gaseous formaldehyde may cause temporary irritation or a burning sensation. Wood dust can cause mechanical irritation.

Skin Contact:

Both formaldehyde and various species of wood dust may evoke allergic contact dermatitis in sensitized individuals.

Ingestion:

Not likely to occur.

Inhalation

Gaseous Formaldehyde:

May cause temporary irritation to eyes, nose and throat. Some reports suggest that formaldehyde may cause respiratory sensitization, such as asthma, and that pre-existing respiratory disorders may be aggravated by exposure.

Formaldehyde is listed by the International Agency for Research on Cancer (IARC) as a probable human carcinogen. The National Toxicology Program (NTP) includes formaldehyde in the Annual Report on Carcinogens. Formaldehyde is regulated by OSHA as a potential cancer agent.

Wood Dust:

May cause nasal dryness, irritation and obstruction. Coughing, wheezing and sneezing; sinusitis and prolonged colds have also been reported.

Depending on species, may cause respiratory sensitization and/or irritation. IARC classifies wood dust as a carcinogen to humans (Group 1). This classification is based primarily on IARC's evaluation of increased risk in the occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with exposure to wood dust. IARC did not find sufficient evidence to associate cancers of the oropharynx, hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon or rectum with exposure to wood dust.

¹In AFL-CIO v. OSHA 965 F.2d 962 (11th Cir. 1992), the court overturned OSHA's 1989 Air Contaminants Rule, including the specific PELs for wood dust that OSHA had established at that time. The 1989 PELs were: TWA - 5.0 mg/m³; STEL (15 min.) - 10.0 mg/m³ (all softwoods and hardwoods, except Western Red Cedar); Western Red Cedar: TWA 2.5 mg/m³.

Wood dust is now officially regulated as an organic dust under the Particulates Not Otherwise Regulated (PNOR) or inert or Nuisance Dust categories at PELs noted under the Health Effects Information section of this MSDS. However, a number of states have incorporated provisions of the 1989 standard in their state plans. Additionally, OSHA has announced that it may cite companies under the OSHA Act General Duty Clause under appropriate circumstances for non-compliance with the 1989 PELs.

SECTION 7: PRECAUTIONS

Formaldehyde:	Provide adequate ventilation to reduce the possible buildup of formaldehyde gas, particularly when high temperatures occur.
Wood Dust:	Avoid dusty conditions and provide good ventilation.

SECTION 8: SPECIAL PROTECTION INFORMATION:

Ventilation:	Provide adequate general and local exhaust ventilation to keep airborne contaminant levels below the OSHA PELs.
Personal Protective Equipment:	Wear goggles or safety glasses when manufacturing or machining the product. Wear NIOSH/MSHA approved respirator when the allowable exposure limits may be exceeded. Other protective equipment, such as gloves and outer garments, may be needed depending on dust conditions.

SECTION 9: EMERGENCY AND FIRST AID PROCEDURES

Eyes:	Flush eyes with large amounts of water. Remove to fresh air. If irritation persists, get medical attention.
Skin:	Wash affected areas with soap and water. Get medical advice if rash or persistent irritation or dermatitis occurs.
Inhalation:	Remove to fresh air. Get medical advice if persistent irritation, severe coughing or breathing difficulty occurs.
Ingestion:	N/A

SECTION 10: REGULATORY INFORMATION 0.3 PPM

HUD:	Particleboard certified as meeting the Department of Housing and Urban Development (HUD) Manufacturing Home Construction and Safety Standards, 24 CFR Part 3280, does not permit in excess of 0.3 ppm formaldehyde when tested in accordance with ASTM E1333-90, Large Scale Test Method for Determining Formaldehyde Emissions from Wood Products.
Minnesota:	Minnesota Statutes 1984 Section 144.495 and 325 F.18 required that all particleboard and medium-density fiberboard sold or used in Minnesota meet the HUD Formaldehyde Emissions Standard, 24 CFR Sections 3280.308 and 3280.406.
California's Safe Drinking Water and Toxic Enforcement Act of 1986 (Initiative Measure, Proposition 65):	Title 22 California Code of Regulations requires that a clear and reasonable warning be given before exposure to chemicals listed by the State as causing cancer or reproductive toxicity. Formaldehyde is on California's list of chemicals known to the State to cause cancer.

DISCLAIMER

ROSEBURG FOREST PRODUCTS believes the information contained in this MSDS to be accurate at the time of preparation and has been compiled using sources believed to be reliable. However, ROSEBURG FOREST PRODUCTS makes no warranty, either expressed or implied, concerning the accuracy or completeness of the information presented. It is the responsibility of the user to comply with local, state and federal regulations concerning use of this product. It is the further responsibility of the buyer to research and understand safe methods of storing, handling and disposal of this product.